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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,747	07/28/2003	Tamotsu Yamamoto	2003_0855A	4403

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WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER

AUGUSTINE, NICHOLAS

ART UNIT PAPER NUMBER

2179

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/627,747

Applicant(s)

YAMAMOTO ET AL.

Examiner

Nicholas Augustine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 07/22/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuk et al (US 2003/0076301 A1) in view of Buckley et al (US 2003/0135649 A1).

As for independent claim 1, Tsuk teaches portable electronic equipment (700) comprising: a first manipulator means (712A) for performing a first screen process on an information displayed on a display means (par.70, line 8); a second manipulator means

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(710) for performing a second screen process on the information (924); and a controller means, said controller means controlling said first manipulator means, said second manipulator means, and said display means (par.73, lines 1-3); wherein, responsive to input from said first manipulator means, said controller means performs the first screen process of scrolling a screen displaying the information and selecting a display position (par.70, line 8); and responsive to input in a circumferential direction from said second manipulator means (934), said controller means performs the second screen process (934 and par.73, lines 1-3). the second screen process being one of switching the screen with the selected display position as a reference (par.81, lines 3-4). Tsuk does not specifically mention the second screen process being one of scaling. However in the same field of endeavor Buckley teaches the second screen process being one of scaling up, scaling down, and switching the screen with the selected display position as a reference (par.22, line 3 and 14-15 and figs.2-4). It would have been obvious at the time of the invention to combine the method of Buckley into the device and method of Tsuk. The motivation to combine is fast and easy views of data for reading at higher resolutions in another words zooming in (par.20, lines 5-8).

Note: that is appreciated that the method of Buckley can easily be implemented into the device and methods of Apple for the purposes of the user being able to see data at higher resolutions for a better view to make up for the small screen real estate. Also note that Apple's invention is not limited to a media player and can be in the form of any standard common portable device such as a cell phone, PDA or the like as suggested

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by Tsuk (par.38, lines 15-17).

*Please note the analysis of claim 1 for claims 2-15 below*

As for dependent claim 2, Tsuk teaches the portable electronic equipment of claim 1, wherein said second manipulator means includes a ring-shaped manipulator (710), and said first manipulator means is provided on a side of one of inner and outer circumferences of said ring-shaped manipulator (712A).

As for dependent claim 3, Tsuk teaches the portable electronic equipment of claim 1, wherein said second manipulator means includes a rotatable ring-shaped manipulator (910, 934), and further includes a rotation detection means for detecting a direction (par.77, line13) and amount of rotation of said second manipulator means (par.79, line 15).

As for dependent claim 4, Tsuk teaches the portable electronic equipment of claim 3, wherein said rotation detection means is disposed on a bottom face of said ring-shaped manipulator (fig.8B, 854,852); said rotation detection means comprises: a rotation pickup unit (856) coupled to the rotatable ring-shaped manipulator, wherein the rotation pickup unit is optically or electrically coupled to the rotatable ring-shaped manipulator (par.77, lines 13-16); and sensors opposed to said rotatable ring-shaped manipulator (par.79, lines 7-10 and fig.12) with a predetermined clearance (fig.8B); and said rotation

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detection means detects movement of said ring magnet above said sensors (par.91, line 3 and 7). Note: That the sensors are optical or electronic instead of magnets that are magnetized for this purpose it is appreciated that all three solve the same problem of sensing and that is well known in the art that optical and electronic methods are a new generation of sensing, detecting signals that provide better results than of magnetic methods. For the purposes of the analysis of this claim those skilled in the art will appreciate that Tsuk is utilizing a newer method of sensing and if optical or electronic sensors and detectors had not been available at the time of Tsuk invention would have made the use of magnetism with magnetic sensors.

As for dependent claim 5, Tsuk teaches the portable electronic equipment of claim 3, wherein said rotation detection means detects a direction and amount of rotation of said second manipulator means (par.91, lines 9-11); and said controller means performs a screen process, the screen process being one of switching a displayed screen (par.92, lines 6-7). Tsuk does not specially mention that of scaling up, scaling down on the screen. However in the same field of endeavor Buckley teaches the second screen process being one of scaling up, scaling down, and switching the screen with the selected display position as a reference (par.22, line 3 and 14-15 and figs.2-4). It would have been obvious at the time of the invention to combine the method of Buckley into the device and method of Tsuk. The motivation to combine is fast and easy views of data for reading at higher resolutions in another words zooming in (par.20, lines 5-8).

As for dependent claim 6, Tsuk teaches the portable electronic equipment of claim 1, further comprising a circular manipulator (910), wherein said circular manipulator includes said first manipulator means (712A) and said second manipulator means (934) on a bottom side thereof (par.70, lines 10-12); and said second manipulator means can detect sliding operation of said manipulator in a circumferential direction thereof (934), and a direction and amount of rotation of said manipulator caused by the sliding operation (par.69, lines 14-18).

As for dependent claim 7, Tsuk teaches the portable electronic equipment of claim 6, wherein said first manipulator means includes a press button and a self-restoring contact opposed to said press button (712B and par.70, line 10); and actuation of said self-restoring contact by said press button allows the screen on said display means to be scrolled at least vertical and horizontal directions (924 and par.69, line 6).

As for dependent claim 8, Tsuk teaches the portable electronic equipment of claim 6, wherein said second manipulator means comprises: a ring-shaped conductive depressing portion (par.84, line 12); and a plurality of concentrically disposed second contacts opposed to said depressing portion (712A) with a predetermined clearance there between (par.70, lines 10-12 and fig. 8B); and a move of said depressing portion on said second contacts is detected as a direction and amount of rotation of the sliding

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operation (par.69, lines 14-18).

As for dependent claim 9, Tsuk teaches the portable electronic equipment of claim 6, wherein according to a detected direction and amount of rotation of the sliding operation, said controller means performs a process, the process being one of switching the displayed screen (par.92, lines 6-7). Tsuk does not specially mention that of scaling up, scaling down on the screen. However in the same field of endeavor Buckley teaches the second screen process being one of scaling up, scaling down, and switching the screen with the selected display position as a reference (par.22, line 3 and 14-15 and figs.2-4). It would have been obvious at the time of the invention to combine the method of Buckley into the device and method of Tsuk. The motivation to combine is fast and easy views of data for reading at higher resolutions in another words zooming in (par.20, lines 5-8).

As for dependent claim 10, Tsuk teaches the portable electronic equipment of claim 6, including said first manipulator means along an outer circumference of said second manipulator means (712A), wherein said first manipulator means includes a conductive depressing portion and a first contact opposed to said depressing portion (par.70, lines 8-12 and par.77, line 15; wherein the first manipulator buttons are appreciated by one of ordinary skill the clicking of a button with the technology presented for the rotatable manipulator share equally the same method although not specifically mentioned.



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As for dependent claim 11, Tsuk teaches the portable electronic equipment of claim 6, wherein said second manipulator means detects operation in a circumferential direction of said manipulator (9340; and said first manipulator means detects operation within the same plane (fig.8 B) in a direction different from that of said second manipulator means (par.70, line 10); i.e. angular versus linear.

As for dependent claim 12, Tsuk teaches the portable electronic equipment of claim 6, wherein said manipulator has an indication means for indicating a position of said first manipulator means (923 and par.70, line 8).

As for dependent claim 13, Tsuk teaches the portable electronic equipment of claim 1, wherein said first manipulator means is a multi-directional switch operated by one of depressing and tilting (fig.7, left, up, down, right directional and par.70, line 8).

As for dependent claim 15, Tsuk teaches the portable electronic equipment of claim 1 further comprising a built-in display device (904).

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuk in view of Buckley as applied to claims 1-13 and 15 above, and further in view of Paloniemi (US 2001/0017934 A1).

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As for dependent claim 14, Tsuk in view of Buckley teaches the portable electronic equipment of claim 1 (note the analysis of claim 1), Tsuk in view of Buckley does not specifically mention trackball. However for the same problem sought to be solved Paloniemi teaches wherein said first manipulator means is a track ball (par.2).. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the device and method of Paloniemi into the device and methods of Tsuk as modified by Buckley, this is true because electronic navigation is made easier through input devices such as buttons, wheels, and trackballs (par.2, line 1)

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

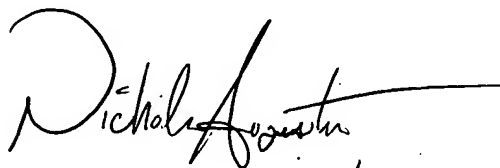
- Laursen et al (US 6,288,718 B1) – Zooming method on portable device
- Sunata, Jin (US 2003/0177444 A1) – Zooming method on portable device
- Casals, Eduardo (US 2003/0040341 A1) – Multi-modal method
- Masunaga, Makoto (US 5,563,631) – Portable Information Apparatus with multiple configurations including switches, trackball, dial etc.

***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

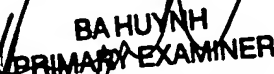
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



N. Augustine  
October 26, 2006

Nicholas Augustine  
Examiner  
2179



BA HUYNH  
PRIMARY EXAMINER